

### **REMARKS**

Claims 1-20 are pending. The specification is amended to obviate informalities raised in the Office Action. No new matter is submitted. Accordingly, entry of the Amendment and prompt allowance of claims 1-20 is respectfully requested.

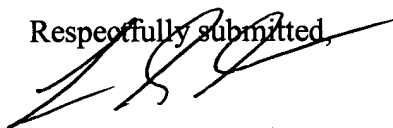
Applicants appreciate the indication of claims 1-20 as allowable in item 3 of the Office Action, provided the "Group IVA" nomenclature used in the specification is clarified. By this Amendment, the specification has been amended at paragraphs [0010] and [0043] to clarify that the "Group IVA" nomenclature refers to "IUPAC Group IVA notation". In paragraph [0010], which is the first occurrence of any reference to Group IVA in the specification, the IUPAC Group IVA nomenclature is further clarified by expressing that it "includes, for example, titanium, zirconium and hafnium". A copy of a Periodic Table evidencing the IUPAC Group IVA notation as clarified in the Office Action is attached hereto for the Examiner's convenience. Since the objection to the nomenclature has been clarified as requested in the Office Action, the allowance of claims 1-20 is respectfully requested.

In item 1 of the Office Action, the specification is objected to for failing to clarify the "Group IVA" nomenclature as discussed above. Likewise, in item 2 of the Office Action, claims 1-20 are objected to for failing to clarify the "Group IVA" nomenclature as discussed above. This Amendment clarifies the cited nomenclature and thus obviates the objections to the specification and claims in this regard. Further, the Amendment to paragraph [0007] corrects the informality cited in item 1 of the Office Action. Thus, all objections to the specification and claims having been obviated, withdrawal of all objections cited in the Office Action is respectfully requested.

Further, prompt allowance of claims 1-20 is respectfully solicited as Applicants submit that the claims patentably distinguish over the cited art for at least the reasons cited in the Office Action and pose no 35 U.S.C. §112 issues.

Should the Examiner determine that anything further is desirable to place this application in even better form for allowance, the Examiner is invited to contact the undersigned at the telephone number indicated below.

Respectfully submitted,



Leslie S. Szivos, Ph.D.  
Reg. No.: 39,394

Scully, Scott, Murphy & Presser  
400 Garden City Plaza - Ste. 300  
Garden City, New York 11530  
(516) 742-4343

Attachments:

Periodic Table with IUPAC notation

LSS/DJC/jam



# Catalytica Studies Division

<div> <div>1 IA</div> <div>2 II A</div> <div>3 III A</div> <div>4 IV A</div> <div>5 VA</div> <div>6 VIA</div> <div>7 VII A</div> <div>8 VIII A</div> <div>9 IX A</div> <div>10 X A</div> <div>11 XI A</div> <div>12 XII A</div> </div>																<div> <div>13 III B</div> <div>14 IV B</div> <div>15 V B</div> <div>16 VI B</div> <div>17 VII B</div> <div>18 VIII B</div> </div>															
1 H 1.00794	2 He 4.00260	3 Li 6.941	4 Be 9.01218	5 B 10.81	6 C 12.011	7 N 14.0067	8 O 15.9994	9 F 18.9984	10 Ne 20.179	11 Na 22.9898	12 Mg 24.305	13 Al 26.9815	14 Si 28.0855	15 P 30.9738	16 S 32.06	17 Cl 35.453	18 Ar 39.948														
19 K 39.0983	20 Ca 40.08	21 Sc 44.9559	22 Ti 47.88	23 V 50.9415	24 Cr 51.996	25 Mn 54.9380	26 Fe 55.847	27 Co 58.9332	28 Ni 58.69	29 Cu 63.546	30 Zn 65.39	31 Ga 69.72	32 Ge 72.59	33 As 74.9216	34 Se 78.96	35 Br 79.904	36 Kr 83.80														
37 Rb 85.4678	38 Sr 87.62	39 Y 88.9059	40 Zr 91.224	41 Nb 92.9064	42 Mo 95.94	43 Tc (98)	44 Ru 101.07	45 Rh 102.906	46 Pd 106.42	47 Ag 107.868	48 Cd 112.41	49 In 114.82	50 Sn 118.71	51 Sb 121.75	52 Te 127.60	53 I 126.905	54 Xe 131.29														
55 Cs 132.905	56 Ba 137.33	57 La 138.906	58 Ce 140.908	59 Pr 140.908	60 Nd 144.24	61 Pm (145)	62 Sm 150.36	63 Eu 151.96	64 Gd 157.25	65 Tb 158.925	66 Dy 162.50	67 Ho 164.930	68 Er 167.26	69 Tm 168.934	70 Yb 173.04	71 Lu 174.967	72 Hf 178.49														
73 Ta 180.948	74 W 183.85	75 Re 186.207	76 Os 190.2	77 Ir 192.22	78 Pt 195.08	79 Au 196.967	80 Hg 200.59	81 Tl 204.38	82 Pb 207.2	83 Bi (209)	84 Po (210)	85 At (210)	86 Rn (222)	87 Fr (223)	88 Ra (226)	89 Ac (227)	90 Th (232)														
91 Pa 231.036	92 U 238.029	93 Np 237.048	94 Pu (244)	95 Am (243)	96 Cm (247)	97 Bk (247)	98 Cf (251)	99 Es (252)	100 Fm (257)	101 Md (258)	102 No (259)	103 Lr (260)	<div> <div>Numbers in parentheses: available radioactive isotope of longest half-life.</div> </div>																		
<div> <div>Lanthanides</div> <div>Actinides</div> </div>																<div> <div>Key</div> <div> <div>← Atomic Number</div> <div>← Symbol</div> <div>← 1983 Atomic Weight</div> </div> </div>															

## Conversion Factors

1 atm	=	101.325 kPa	=	14.69595 psi	=	1.01325 bar
1 inch water	=	249.089 Pa				1 mm Hg = 133.3224 Pa
1 Btu	=	251.996 cal	=	1055.056 J		1 kcal = 4.1868 kJ
1 ft <sup>3</sup>	=	0.02831685 m <sup>3</sup>				1 in <sup>3</sup> = 16.387064 cm <sup>3</sup>
1 μm	=	10000 Å		1 nm = 10 Å		1 mile = 1609.344 m
1 ft	=	0.3048 m		1 km = 3280.840 ft		1 mil = 0.0254 mm
1 lb (avoir.)	=	0.45359237 kg				1 watt = 3.41214 Btu/h

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Catalytica Studies Division, 430 Ferguson Drive, Mountain View, CA, 94043-5272.